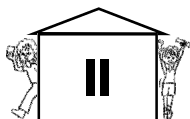


## CONTENTS

<b>Pages</b>	<b>Activities</b>
II	<i>Contents</i>
III	<i>Introduction</i>
IV - VII	<i>Strategies</i>
VIII	<i>Mini LUK Self Checking System</i>
IX	<i>Progress Chart</i>
<b>1–10</b>	<b>Multiplication by 2, arranged vertically.</b>
1 - 3	No carrying.
4 - 10	Carrying the ten into the tens column.
11 - 18	<b>Multiplication by 2, arranged horizontally.</b>
11 - 12	No carrying.
13 - 16	Carrying the ten into the tens column.
17 - 18	Double and double again.
<b>19 - 26</b>	<b>Multiplication by 5, arranged vertically.</b>
19	No carrying.
20 - 25	Carrying the ten into the tens column.
<b>27 - 28</b>	<b>Multiplication by 10.</b>
27	Arranged horizontally.
28	Arranged vertically.
<b>29 - 30</b>	<b>Mixed multiplication by 5 and 10, arranged vertically.</b>
<b>31 - 34</b>	<b>Multiplication by 2 and 5; simple problems.</b>
31	Double multiples of 10, no carrying.
32	Multiples of 2, 5 and 10 using the term 'groups'.
33	Multiples of 2 and 5 using the terms: double, multiply, product, time.
34	Multiples of 2 and 5 using the terms: groups, double, multiply, product, time.
<b>35 - 38</b>	<b>Multiplication of decimal fractions by 2 and 5.</b>
35	Multiplication by 2 vertical arrangement.
36	Multiplication by 5 vertical arrangement.
37 - 38	Multiplication by 2 and 5 vertical arrangement.
X	Author



# INTRODUCTION

**Numeracy** refers to student's flexibility with numbers, to the understanding of the meaning of numbers and number systems, and to the ability to apply this knowledge and skills to solve problems.

Every child should be taught the basic mathematical skills that allow him/her to function well in their daily lives.

An increased importance is placed on using problem solving as the core component of teaching mathematics. Solving problems is an integral part of today's maths programs. However, mathematical problem solving is a complex activity requiring reasonable level of automaticity in recall and application of fundamental number skills.

Young children do not yet have an adequate base of number knowledge and skills to solve number problems. Tasks that are too advanced and too complex frustrate the students and discourage them from trying new strategies to acquire essential mathematical skills and develop a positive disposition towards mathematics.

Many children have a poorly developed visual memory and associated visual skills. Individual recognition in mathematical representation plays a critical role in the development of patterns and structures, absorption and generalisation of mathematical concepts and strategies.

**Students need a structured approach,** concepts clearly and systematically presented and sufficient time allowed to participate in acquiring new skills. Students need to see and understand mathematical patterns and structures and recognise mathematical similarities.

**Jays' workbook programs** provide handy strategies to teach the students skills needed to perform relatively simple mathematical tasks. Students are encouraged to master basic number facts and learn simple computation procedures necessary for solving mathematical problems.

**"Multiplication Activities"** will develop automaticity in recalling basic number facts and in choosing and applying the most suitable computational procedures.

The important feature of automaticity is a fast recall and efficient and effective cognitive processing.

It is essential to address automaticity in basic number skills together with learning fundamental strategies for basic computations. The application of correct strategies will bring on valuable cognitive changes associated with increased efficiency of working memory and more successful meaningful engagement with complex tasks. Tasks that require multiplication depend on the recall of multiplication facts (tables), on the understanding the concept of place value and on the skill to multiply 2 and more digit numbers by one digit numbers.

Students will develop the capacity for spontaneous generalisation, they will be able to transfer learned skills and strategies to new situations.

Workbooks preceding **"Multiplication Activities"** are:

- ⇒ Tens and Once
- ⇒ Multiples of 2 and 20
- ⇒ Concept of 100 Multiples of 5 and 10
- ⇒ Multiply 2, 3, 4, 5
- ⇒ Multiplication level 1



# Strategies and suggestions page by page.

## Page 1

$\begin{array}{r} 40 \\ \times 2 \\ \hline 80 \end{array}$	$\begin{array}{r} 4 \quad 0 \\ \times 2 \quad \times 2 \\ \hline 8 \quad 0 \end{array}$
--	---

or  $2 \times 40 = 2 \times 4 \times 10 = 80$

$\begin{array}{r} 300 \\ \times 2 \\ \hline 600 \end{array}$	$\begin{array}{r} 3 \quad 0 \quad 0 \\ \times 2 \quad \times 2 \quad \times 2 \\ \hline 6 \quad 0 \quad 0 \end{array}$
--	--

or  $2 \times 300 = 2 \times 3 \times 10 \times 10$   
 $2 \times 3 \times 100 = 600$

## Pages 2 - 3

$\begin{array}{r} 34 \\ \times 2 \\ \hline 68 \end{array}$	$\begin{array}{r} 3 \quad 4 \\ \times 2 \quad \times 2 \\ \hline 6 \quad 8 \end{array}$
--	---

or  $2 \times 30 + 2 \times 4$   
 $60 + 8 = 68$

## Pages 4 - 10

$\begin{array}{r} 1 \quad 65 \\ \times 2 \\ \hline 130 \end{array}$
---

or  $2 \times 60 = 120$   
 $2 \times 5 = +10$   
 $130$

## Pages 11 - 16

$54 \times 2 = 108$
$50 \times 2 = 100$
$4 \times 2 = + 8$
$108$

or  $\begin{array}{r} 8 \\ \times 2 \\ \hline 10 \end{array} 54 \times 2 = 108$

## Pages 17 - 18

$32 \times 2 \times 2 = 128$
$32 \times (2 \times 2) =$
$32 \times 4 =$

$32 \times 4 =$   
 $30 \times 4 = 120$   
 $2 \times 4 = + 8$   
 $128$

$(32 \times 2) \times 2 =$   
 $60 \times 2 = 120$   
 $4 \times 2 = + 8$   
 $128$



Multiply the numbers by 2 .




<div style="border: 1px dashed black; padding: 2px; display: inline-block;">1</div> $\begin{array}{r} 50 \\ \times 2 \\ \hline \\ \hline \end{array}$	<div style="border: 1px dashed black; padding: 2px; display: inline-block;">2</div> $\begin{array}{r} 70 \\ \times 2 \\ \hline \\ \hline \end{array}$	<div style="border: 1px dashed black; padding: 2px; display: inline-block;">3</div> $\begin{array}{r} 30 \\ \times 2 \\ \hline \\ \hline \end{array}$
<div style="border: 1px dashed black; padding: 2px; display: inline-block;">4</div> $\begin{array}{r} 51 \\ \times 2 \\ \hline \\ \hline \end{array}$	<div style="border: 1px dashed black; padding: 2px; display: inline-block;">5</div> $\begin{array}{r} 31 \\ \times 2 \\ \hline \\ \hline \end{array}$	<div style="border: 1px dashed black; padding: 2px; display: inline-block;">6</div> $\begin{array}{r} 81 \\ \times 2 \\ \hline \\ \hline \end{array}$
<div style="border: 1px dashed black; padding: 2px; display: inline-block;">7</div> $\begin{array}{r} 42 \\ \times 2 \\ \hline \\ \hline \end{array}$	<div style="border: 1px dashed black; padding: 2px; display: inline-block;">8</div> $\begin{array}{r} 62 \\ \times 2 \\ \hline \\ \hline \end{array}$	<div style="border: 1px dashed black; padding: 2px; display: inline-block;">9</div> $\begin{array}{r} 12 \\ \times 2 \\ \hline \\ \hline \end{array}$
<div style="border: 1px dashed black; padding: 2px; display: inline-block;">10</div> $\begin{array}{r} 93 \\ \times 2 \\ \hline \\ \hline \end{array}$	<div style="border: 1px dashed black; padding: 2px; display: inline-block;">11</div> $\begin{array}{r} 53 \\ \times 2 \\ \hline \\ \hline \end{array}$	<div style="border: 1px dashed black; padding: 2px; display: inline-block;">12</div> $\begin{array}{r} 33 \\ \times 2 \\ \hline \\ \hline \end{array}$

Answers



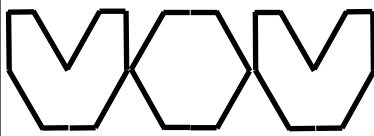
124	24	106	66	186	100	84	102	140	62	60	162
2	12	6	1	9	3	10	4	8	5	11	7




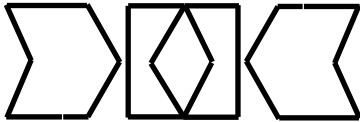
Double the prices.

<div style="border: 1px dashed black; padding: 2px; display: inline-block;">1</div> $\$29 \times 2 = \underline{\hspace{2cm}}$	<div style="border: 1px dashed black; padding: 2px; display: inline-block;">2</div> $\$39 \times 2 = \underline{\hspace{2cm}}$	<div style="border: 1px dashed black; padding: 2px; display: inline-block;">3</div> $\$19 \times 2 = \underline{\hspace{2cm}}$									
<div style="border: 1px dashed black; padding: 2px; display: inline-block;">4</div> $\$49 \times 2 = \underline{\hspace{2cm}}$	<div style="border: 1px dashed black; padding: 2px; display: inline-block;">5</div> $\$69 \times 2 = \underline{\hspace{2cm}}$	<div style="border: 1px dashed black; padding: 2px; display: inline-block;">6</div> $\$59 \times 2 = \underline{\hspace{2cm}}$									
<div style="border: 1px dashed black; padding: 2px; display: inline-block;">7</div> $\$28 \times 2 = \underline{\hspace{2cm}}$	<div style="border: 1px dashed black; padding: 2px; display: inline-block;">8</div> $\$68 \times 2 = \underline{\hspace{2cm}}$	<div style="border: 1px dashed black; padding: 2px; display: inline-block;">9</div> $\$78 \times 2 = \underline{\hspace{2cm}}$									
<div style="border: 1px dashed black; padding: 2px; display: inline-block;">10</div> $\$58 \times 2 = \underline{\hspace{2cm}}$	<div style="border: 1px dashed black; padding: 2px; display: inline-block;">11</div> $\$38 \times 2 = \underline{\hspace{2cm}}$	<div style="border: 1px dashed black; padding: 2px; display: inline-block;">12</div> $\$48 \times 2 = \underline{\hspace{2cm}}$									
Answers											
96	38	118	98	58	56	78	138	156	136	76	116
3	8	9	6	11	12	10	2	1	4	7	5
											

Multiply the prices by 5 .

<div style="border: 1px dashed black; padding: 2px; display: inline-block;">1</div> $\begin{array}{r} \$24 \\ \times 5 \\ \hline \end{array}$ \$ _____	<div style="border: 1px dashed black; padding: 2px; display: inline-block;">2</div> $\begin{array}{r} \$23 \\ \times 5 \\ \hline \end{array}$ \$ _____	<div style="border: 1px dashed black; padding: 2px; display: inline-block;">3</div> $\begin{array}{r} \$25 \\ \times 5 \\ \hline \end{array}$ \$ _____									
<div style="border: 1px dashed black; padding: 2px; display: inline-block;">4</div> $\begin{array}{r} \$22 \\ \times 5 \\ \hline \end{array}$ \$ _____	<div style="border: 1px dashed black; padding: 2px; display: inline-block;">5</div> $\begin{array}{r} \$26 \\ \times 5 \\ \hline \end{array}$ \$ _____	<div style="border: 1px dashed black; padding: 2px; display: inline-block;">6</div> $\begin{array}{r} \$21 \\ \times 5 \\ \hline \end{array}$ \$ _____									
<div style="border: 1px dashed black; padding: 2px; display: inline-block;">7</div> $\begin{array}{r} \$31 \\ \times 5 \\ \hline \end{array}$ \$ _____	<div style="border: 1px dashed black; padding: 2px; display: inline-block;">8</div> $\begin{array}{r} \$33 \\ \times 5 \\ \hline \end{array}$ \$ _____	<div style="border: 1px dashed black; padding: 2px; display: inline-block;">9</div> $\begin{array}{r} \$32 \\ \times 5 \\ \hline \end{array}$ \$ _____									
<div style="border: 1px dashed black; padding: 2px; display: inline-block;">10</div> $\begin{array}{r} \$35 \\ \times 5 \\ \hline \end{array}$ \$ _____	<div style="border: 1px dashed black; padding: 2px; display: inline-block;">11</div> $\begin{array}{r} \$34 \\ \times 5 \\ \hline \end{array}$ \$ _____	<div style="border: 1px dashed black; padding: 2px; display: inline-block;">12</div> $\begin{array}{r} \$36 \\ \times 5 \\ \hline \end{array}$ \$ _____									
Answers											
155	105	110	180	170	120	175	125	115	130	165	160
12	4	5	10	7	6	11	1	3	8	9	2
											

# What is the price?

<div style="border: 1px dashed black; display: inline-block; padding: 2px;">1</div> $\begin{array}{r} \$2.50 \\ \times 2 \\ \hline \end{array}$ <p>\$ _____</p>	<div style="border: 1px dashed black; display: inline-block; padding: 2px;">2</div> $\begin{array}{r} \$3.70 \\ \times 2 \\ \hline \end{array}$ <p>\$ _____</p>	<div style="border: 1px dashed black; display: inline-block; padding: 2px;">3</div> $\begin{array}{r} \$4.20 \\ \times 2 \\ \hline \end{array}$ <p>\$ _____</p>
<div style="border: 1px dashed black; display: inline-block; padding: 2px;">4</div> $\begin{array}{r} \$1.30 \\ \times 5 \\ \hline \end{array}$ <p>\$ _____</p>	<div style="border: 1px dashed black; display: inline-block; padding: 2px;">5</div> $\begin{array}{r} \$5.30 \\ \times 5 \\ \hline \end{array}$ <p>\$ _____</p>	<div style="border: 1px dashed black; display: inline-block; padding: 2px;">6</div> $\begin{array}{r} \$6.30 \\ \times 5 \\ \hline \end{array}$ <p>\$ _____</p>
<div style="border: 1px dashed black; display: inline-block; padding: 2px;">7</div> $\begin{array}{r} \$7.80 \\ \times 2 \\ \hline \end{array}$ <p>\$ _____</p>	<div style="border: 1px dashed black; display: inline-block; padding: 2px;">8</div> $\begin{array}{r} \$4.60 \\ \times 2 \\ \hline \end{array}$ <p>\$ _____</p>	<div style="border: 1px dashed black; display: inline-block; padding: 2px;">9</div> $\begin{array}{r} \$5.90 \\ \times 2 \\ \hline \end{array}$ <p>\$ _____</p>
<div style="border: 1px dashed black; display: inline-block; padding: 2px;">10</div> $\begin{array}{r} \$9.40 \\ \times 5 \\ \hline \end{array}$ <p>\$ _____</p>	<div style="border: 1px dashed black; display: inline-block; padding: 2px;">11</div> $\begin{array}{r} \$8.60 \\ \times 5 \\ \hline \end{array}$ <p>\$ _____</p>	<div style="border: 1px dashed black; display: inline-block; padding: 2px;">12</div> $\begin{array}{r} \$4.70 \\ \times 5 \\ \hline \end{array}$ <p>\$ _____</p>
		
		

## Answers

8.40	9
31.50	2
43	4
7.40	7
15.60	6
47	11
5	5
6.50	12
23.50	8
26.50	3
15.80	10
9.20	1

# www.jayseducation.com

## Reproducible Books or printable CDs and Downloads

### **Numeracy**

Basic Number Concepts  
Count and Write  
Find the Missing Number  
Starting to Add  
Mental Computation Addition to 10  
Subtraction Concept of 10  
The Concept of 20  
Money in Coins  
The Concept of Money - Coins  
What Time Is It?  
Multiples of 2 & 20  
Concept of 100 Multiples of 10 & 5  
Multiply 2, 3, 4, 5  
Fractions 2  
Fractions 3  
Fractions 4  
All about Angles "A"  
All about Angles "B"  
Angles in Triangles  
Simple Steps to Algebra  
The Four Operations

### **Literacy**

Reading Readiness  
Teaching Reading  
Let's Start Read and Write  
Using Phonics  
Read About Write About Dotty  
Read About Write About Spotty  
Adventures with Dotty and Spotty  
Magic e  
Sounds are Simple  
Spell Well to Excel  
English for Everyone  
Time and Behaviour

### **LUK Self Checking System**

Find the Missing Number  
Addition level 1  
Addition level 2  
Subtraction level 1  
Multiplication level 1  
DIVISION Halves and Quarters  
Concept of Money  
Fractions  
Let's Practice Subtractions  
Tens and Ones - Focus on Money  
Reading & Spelling Essentials  
LUK Control Box

### **Mini LUK Self Checking System**

Counting Money  
Get Ready for Problem Solving  
Multiplication Activities  
Angles in Triangles  
All About Angles  
Early Reading Intervention  
Reading Intervention  
Reading and Spelling Short Words  
Reading for Meaning  
Reading and Spelling Patterns  
Mini LUK Control Box

### **Visual Literacy (Pre-Writing)**

Time and Behaviour  
Basic Pencil Skills  
More Pencil Skills  
Reading Readiness  
Drawing Workshop -  
Learn to Draw in Few Steps  
Get Smart With Art  
Draw and Talk

**Jays' Education**

Phone/Fax: 07 3822 1813

Email: [info@jayseducation.com](mailto:info@jayseducation.com)

[www.jayseducation.com](http://www.jayseducation.com)

ISBN 978-1-921622-48-9



9 781921 622489